

Serial No.: 09/600,674

### **REMARKS**

Claims 1-9 are pending in the application. Favorable reconsideration of the application is respectfully requested.

#### **I. REJECTION OF CLAIMS 1-3 AND 7-9 UNDER 35 USC §103(a)**

Claims 1-3 and 7-9 remain rejected under 35 USC §103(a) based on *Applicant's Admitted Prior Art (hereinafter "AAPA")* in view of *Inaba et al.* Withdrawal of the rejection is again respectfully requested for at least the following reasons.

In maintaining the rejection, the Examiner notes applicant argues that AAPA in view of the *Inaba* does not teach "forming a structure for each of the least some of said strings..." as recited in claim 1. However, the Examiner posits that AAPA teaches the table showing string pairs as referred to on page 4 of the application. The Examiner indicates the table (structure) associates the strings with the words shared in the string-text units (referring to the page 5 table structure). (O.A., p. 6).

Applicant again must respectfully disagree with the Examiner's interpretation. For ease of explanation, claim 1 is reproduced below incorporating the specific example of claim 3 wherein the "text units" are sentences, and the "strings" are words within such sentences.

#### ***Revised Claim 1:***

1. A method of operating on a text comprising a plurality of sentences, each comprising a plurality of words and each sentence having a same structure, the method being characterised by:

forming a structure for each of at least some of said words, in which structure a word is associated with each sentence in which the word occurs;

for each sentence summing the number of occurrences of each other sentence in the same structure or structures so as to form an individual score for each pair of sentences; and

processing said individual scores for each pair of sentences in order to form a final score for each sentence to determine how many times any word is shared between each pair of sentences and other sentences.

Serial No.: 09/600,674

Thus, in the specific example of claim 1 In the case of claim 3 where "text units" are sentences, and the "strings" are words, the present invention includes the step of "... forming a structure for each of at least some of said words, in which structure a word is associated with each sentence in which the word occurs."

***Example of Present Invention:***

The present application, at page 19, line 22, provides an example of forming a structure for each of at least some words (e.g., "apple"), in which structure the word (e.g., "apple") is associated with each sentence (e.g., sentences 1, 2, 3, 3 and 5) in which the word (e.g., "apple") occurs. Specifically, the application give the example:

**<Apple { Sentence#1#, Sentence#2#, Sentence#3#, Sentence#3#, Sentence#5#}> ;**

represented more generally by the structure:

**<Word {Sentences in which Word occurs}>                      (Invention)**

It therefore is apparent that the present invention relates to forming a structure for each of at least some words, in which structure the word is associated with each sentence in which the word occurs.

***Table in AAPA:***

The Examiner relies on pages 4-5 of the present application and the Tables therein as representing a structure as claimed. Upon close inspection, however, it becomes apparent that the Tables represent an entirely different structure.

Serial No.: 09/600,674

Text unit pairs		Words shared	Score
#1#	#2#	Apple, look, partner	3
#3#	#5#	Apple, Apple	2
#1#	#3#	Apple, Apple	2
#3#	#6#	company	1
#1#	#4#		0
#4#	#5#		0
#1#	#5#	Apple	1
#4#	#6#		0
#1#	#6#		0
#5#	#6#		0
#2#	#3#	Apple, Apple, executive, company	4
#2#	#4#		0
#2#	#5#	Apple	1
#2#	#6#	company	1
#3#	#4#		0

Table

In the upper table on page 5 of the application (reproduced above), text unit pairs (i.e., pairs of sentences) are scored according to how many words they share. Thus, the structure for the first entry in the Table is as follows:

<(Sentence#1#,Sentence#2#){Apple, look, partner}>

represented more generally by the structure:

<(Sentence Pair){Words occurring in both sentences of Sentence Pair}> (Table AAPA)

The above structure for Table clearly is not the same or equivalent to the structure for the Invention <Word {Sentences in which Word occurs}>. Accordingly,

Serial No.: 09/600,674

Table in AAPA clearly does not show the feature of "... forming a structure for each of at least some of said words, in which structure a word is associated with each sentence in which the word occurs." (Claim 3). Nor does the Table in AAPA show the broader aspect of "... forming a structure for each of at least some of said strings, in which structure a string is associated with each text unit in which the string occurs". (Claim 1).

Referring next to Table 1 (lower table) on page 5, reproduced below, this table also fails to teach or suggest the structure recited in accordance with the present invention.

	#1#	#2#	#3#	#4#	#5#	#6#
#2#	3	-	4	0	1	1

Table 1

As exemplified above, Table 1 merely represents a structure for representing the total number of words shared between respective pairs of text units (i.e., sentences). Thus, the structure may be represented generally as:

<Sentence#n#{No. of words shared with Sentence#1#, ..., No. of words shared with Sentence#n-1#, No. of words shared with Sentence#n#, No. of words shared with Sentence#n+1#, ...}>  
(Table 1 AAPA)

The above structure for Table 1 clearly is not the same or equivalent to the structure for the invention <Word {Sentences in which Word occurs}>. Accordingly, Table 1 in AAPA also clearly does not show the feature of "... forming a structure for

Serial No.: 09/600,674

each of at least some of said words, in which structure a word is associated with each sentence in which the word occurs." (Claim 3). Nor does the Table 1 in *AAPA* show the broader aspect of "... forming a structure for each of at least some of said strings, in which structure a string is associated with each text unit in which the string occurs". (Claim 1).

In short, the Examiner's reliance on the teachings of *AAPA* is misplaced. The tables in *AAPA* do not teach or suggest the features of claim 1 (or claim 3, for that matter). Accordingly, the rejection is improper and should be withdrawn. Withdrawal of the rejection is respectfully requested.

In view of the above clarification, the Examiner now undoubtedly appreciates that the present invention involves forming a structure which identifies initially the text units in which the string occurs. The *AAPA*, on the other hand, develops a structure which indicates what words or strings are shared among each possible pair of text units.

Accordingly, it will be appreciated that *AAPA* does not teach "forming a structure...in which a string occurs" as recited in claim 1. Moreover, *Inaba et al.* does not make up for such deficiencies in *AAPA*. Thus, even if the teachings of *AAPA* and *Inaba et al.* were to be combined as proposed by the Examiner, the claimed invention would not result.

Claims 2-3 and 7-9 each depend from claim 1 either directly or indirectly. Therefore, these claims may be distinguished over the teachings of *AAPA* and *Inaba et al.* for at least the same reasons as claim 1.<sup>1</sup>

---

<sup>1</sup>Applicant feels it may be helpful to point out that the use of the term "co-occurrence" is different in *Inaba et al.* than in *AAPA*, and this may otherwise cause some confusion to the Examiner. In *Inaba et al.*, "co-occurrence" refers to two words co-occurring in the same document or text unit. Thus, in *Inaba et al.*, a word co-occurrence index is really just a regular word index, with words replaced by co-occurrences. And so, the word co-occurrence index actually has nothing to do with "storing the degree of coincidence between document and the document text and words" (See, e.g., Office Action, p. 3). In *AAPA* and the present invention, "co-occurrence" is not used but conceptually the idea is that "pairs" refers to pairs of text

Serial No.: 09/600,674

Withdrawal of the rejection is respectfully requested.

**II. REJECTIONS OF CLAIMS 4-6 UNDER 35 USC §103(a)**

Claim 4 is rejected under 35 USC §103(a) based on *AAPA* in view of *Inaba et al.*, and further in view of *Liddy*. Claims 5 and 6 are rejected under 35 USC §103(a) based on *AAPA* in view of *Inaba et al.*, and further in view of *Liddy* and *Baker*. Each of these rejections is respectfully traversed for at least the following reasons.

Claims 4-6 and 8 each depend from claim 1, either directly or indirectly. As a result, each can be distinguished over the teachings of *AAPA* and *Inaba et al.* for at least the same reasons discussed above. Furthermore, neither *Liddy* nor *Baker* make up for the deficiencies. Consequently, withdrawal of the rejections is respectfully requested.

**III. CONCLUSION**

Accordingly, all claims 1-9 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

---


units that contain the same word, which is very different from the word "co-occurrence" in *Inaba et al.*

Serial No.: 09/600,674

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

  
Mark D. Saralino  
Reg. No. 34,243

DATE: July 22, 2005

The Keith Building  
1621 Euclid Avenue  
Nineteenth Floor  
Cleveland, Ohio 44115  
(216) 621-1113  
B:\GEN\YAMA\Yamap728\yamap728.aaf2.wpd